

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/075,203	02	2/14/2002	Glen Kaszubski	MAC-003	7110	
38157	7590	05/21/2004	EXAMINER			
THE GLID		-	YOON, TAE H			
925 EUCLIE SUITE 900	AVENUE	3		ART UNIT	PAPER NUMBER	
CLEVELAN	D, OH 4	4115	1714			

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

					r v i
		Applica	tion No.	Applicant(s)	
		10/075,	203	KASZUBSKI ET AL.	
	Office Action Summary	Examin	er	Art Unit	
		Tae H Y		1714	
7 Period for F	The MAILING DATE of this commun	nication appears on t	he cover sheet with the	correspondence address	-
A SHOR THE MA - Extension after SIX - If the per - If NO per - Failure to Any reply	TENED STATUTORY PERIOD F ILING DATE OF THIS COMMUN as of time may be available under the provisions (6) MONTHS from the mailing date of this comit oid for reply specified above is less than thirty (3 iod for reply is specified above, the maximum so o reply within the set or extended period for reply or received by the Office later than three months atent term adjustment. See 37 CFR 1.704(b).	IICATION. s of 37 CFR 1.136(a). In no e munication. 30) days, a reply within the st tatutory period will apply and v will. by statute, cause the a	event, however, may a reply be ti tatutory minimum of thirty (30) da will expire SIX (6) MONTHS fron pplication to become ABANDONI	mely filed ys will be considered timely. n the mailing date of this communic ED (35 U.S.C. § 133).	ation.
Status					
1) Re	esponsive to communication(s) fil	ed on			
2a)∐ Th	nis action is FINAL.	2b)⊠ This action is	non-final.		*
3) <u></u> Si	nce this application is in condition used in accordance with the pract				s is
Disposition	of Claims				
4a 5)□ CI 6)⊠ CI 7)□ CI	aim(s) <u>1-24</u> is/are pending in the) Of the above claim(s) <u>14-24</u> is/a aim(s) is/are allowed. aim(s) <u>1-13</u> is/are rejected. aim(s) is/are objected to. aim(s) are subject to restri	are withdrawn from c			
Application	Papers				
, —	e specification is objected to by the				
10)∐ Th	e drawing(s) filed on is/are	e: a) accepted or	b) \square objected to by the	Examiner.	
•	pplicant may not request that any obje		•		
	eplacement drawing sheet(s) including				
11)∐ Th	e oath or declaration is objected	to by the Examiner. I	Note the attached Offic	e Action or form PTO-152	2.
-	der 35 U.S.C. § 119				
a) [knowledgment is made of a claim All b) Some * c) None of: Certified copies of the priority Certified copies of the priority Copies of the certified copies application from the Internation the attached detailed Office active.	y documents have be y documents have be s of the priority docur onal Bureau (PCT R	een received. een received in Applica ments have been receiv cule 17.2(a)).	tion No ved in this National Stage	·
Attachment(s)	f References Cited (PTO-892)		4) 🔲 Interview Summar	y (PTO-413)	
2) Notice o	f Draftsperson's Patent Drawing Review (ion Disclosure Statement(s) (PTO-1449 o o(s)/Mail Date	PTO-948) or PTO/SB/08)	Paper No(s)/Mail [

Art Unit: 1714

DETAILED ACTION

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-13, drawn to an adhesive composition, classified in class 524, subclass 492+.
- II. Claims 14-24, drawn to a method of joining at least two adherends, classified in class 156, subclass 60+.

The inventions are distinct, each from the other because of the following reasons: Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used as sealants as evidenced by Product Brochure "MS polymer Silyl" of Kaneka Corp., and because the adhesive of Group II is different from that of Group I and because the joined product has a different chemical structure of an adhesive from the curable adhesive since it is crosslinked.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

Art Unit: 1714

During a telephone conversation with Mr. Stachel on May 13, 2004 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-24 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3, 8 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification and claims recite the glass transition temperature of the adhesive composition. However, said glass transition temperature is known in the art that it directed to the property of thermoplastics and rubbers, not to a composition

Art Unit: 1714

having various components. Said glass transition temperature can be calculated by using Fox equation for organic polymers and copolymers. The instant dehydrating agent such as vinyl trimethoxysilane taught at page 17, line 17 is a monomer, and monomers (and inorganic fillers) do not have a glass transition temperature. Thus, applicant failed to describe adequately how to measure and obtain the recited glass transition temperature of the adhesive composition comprising 50 percent by weight of a polymer having reactive silicon end groups, 40 percent by weight of fumed silica and 10 percent by weight of a dehydrating agent such as vinyl trimethoxysilane, for example.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "the clarity" of claim 1 lacks an antecedent basis. The recited "less than about" in claims 3, 6-9 and 12 is indefinite since said "about" permits some deviations of the value and since said "less than" means less than a definite value.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1714

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Product Brochure "MS polymer Silyl" of Kaneka Corp.

Said Product Brochure teaches the instant formulation #105 (composition) in table of page 5, and it inherently possesses the instant viscosity and Tg. Said MS polymer Silyl meeting the instant (co)polymer having reactive silicon end groups is taught at page 2 wherein the viscosity is also seen (1 Pa • s equals 1,000 centipoise). Said MS polymer has Tg of about – 60 ° C (page 4) and thus said formulation in table of page 5 would have the instant viscosity. Thus, the instant invention lacks novelty.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as obvious over Product Brochure "MS polymer Silyl" of Kaneka Corp. in view of Smith, Jr. et al (US 4,308,372), Staiger et al (US 5,304,621) and/or Imai et al (US 4,760,123).

The instant invention further recites employing clear filler such as fumed amorphous silica over Product Brochure. However, said Product Brochure teaches employing various fillers at the bottom of page 1, and the use of said fumed amorphous silica in moisture curable composition having (co)polymer having reactive silicon end

Art Unit: 1714

groups is well known as taught by Smith, Jr. et al (col. 9, lines 35-57), Staiger et al (col. 7, lines 63-64 and example 13) and Imai et al (col. 8, line 11 and examples 1, 3 and 4, and the fumed silica is amorphous. For example, Staiger et al teach fumed silica, HDK H 15 at col. 18, line 7, which is also taught instant page 6, line 22.

It would have been obvious to one skilled in the art at the time of invention to utilize fumed silica of Smith, Jr. et al, Staiger et al, and/or Imai et al in a composition of Product Brochure as a filler since said Product Brochure teaches employing various fillers and since the use of said fumed amorphous silica in moisture curable composition having (co)polymer having reactive silicon end groups is well known and since the use of clear filler is an obvious design choice absent showing otherwise.

Claims 1-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Imai et al (US 4,760,123) or Staiger et al (US 5,304,621).

Imai et al teach the instant composition in examples 1, 3 and 4, and said composition inherently possesses the instantly recited physical properties. Alkylalkoxy silane components of said examples meet the instant dehydrating agent since it is moisture curable. Various amounts of fillers encompassing the instant amount are taught at col. 8, lines 30-33.

Staiger et a teach the same at col. 7, lines 10-64 and in example 13 wherein α ω -di(trimethylsiloxy)dimethylpolysiloxane is seen. Said α ω -

moisture curable.

Art Unit: 1714

di(trimethylsiloxy)dimethylpolysiloxane meets the instant dehydrating agent since it is

Thus, the instant invention lacks novelty.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tae H Yoon

Primary Examiner

Art Unit 1714